



AIR TRANSPORT ASSOCIATION

April 25, 2008

Docket Management Facility,
U.S. Department of Transportation,
Attention: Docket No. FAA-2007-0242
400 Seventh Street SW.,
Nassif Building, Room PL-401,
Washington, DC 20590.

Subject: GE CF6-80C2/80E1 Series Engines; Thrust Reverser Clevis Pins – Proposed Rule

Dear Sir or Madam:

The Air Transport Association (ATA) appreciates the opportunity to comment on a recent Notice of Proposed Rulemaking (NPRM) docketed at FAA-2007-0242. That NPRM concerns the adoption of an Airworthiness Directive (AD) for GE CF6-80C2/80E1 engines.

We submit the following remarks, provided by American Airlines, Delta Air Lines and US Airways subsequent to ATA member review:

- Existing air carrier parts control procedures adequately ensure that in-stock clevis pins meet OEM standards. As a result, it is recommended that the applicability refers only to those operators who manufacture the clevis pins in-house or procure them from sources other than the OEM.
- This problem is not a fleet-wide safety risk but an isolated event; the issue should not be addressed in an AD.
- The time interval for accomplishment should be extended to at least 33 months.
- The proposed AD should determine a method of identifying pins that have passed the required hardness test.
- It should be clarified in paragraph 2(g)(2) that a stationary hardness tester may be used on clevis pins that are not installed.
- There should be a definition of the term “visible defects” in paragraph 2(g)(4) or that paragraph should be revised to state that: “If the hardness measured is within the range of 31 to 38 Rockwell Hardness (C scale) and the pin passes visual inspection per the maintenance manual, the clevis pin can remain in service.”
- Paragraph (g) should reference specific material that provides procedural instruction, test equipment and specification to accomplish the hardness test.

- Paragraph (h) should require any manufacturer of the clevis pins to perform the required hardness testing before the pin is recorded as serviceable.
- A new part number should be assigned in the proposed AD for pins that meet the hardness requirements.
- Marking requirements should be identified in the proposed AD to provide a means of tracking compliance with the hardness testing on in-service pins.
- Thrust reverser operation is based on flight cycles, therefore paragraph (e) should refer to flight cycles instead of flight hours; we ask that this limit be changed to 3,000 flight cycles. Otherwise, the flight hour limit should be changed to 7,000 so that it will coincide with C-check intervals.
- Paragraph (f) should reference instructions for the proper removal and installation procedures for the clevis pins.

Please see the attached letters for complete details.

We appreciate your serious consideration of these comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Craig Fabian".

Craig Fabian
Director of Technical Operations

Enclosures

AmericanAirlines®

MAINTENANCE & ENGINEERING

April 14, 2008

Craig Fabian
Director, Technical Operations
Air Transport Association
1301 Pennsylvania Avenue, NW Suite 1100
Washington, DC 20004-1707

Subject: GE CF6-80C2/80E1 Series Turbofan Engines – Proposed Rule – Thrust Reverse
Central Drive Units and Upper and Lower Actuators Clevis Pins

Reference: 1) 14 CFR Part 39 (Docket No. FAA-2007-0242; Directorate Identifier 2007-NE-51-AD)
2) ATA Memo 08-AD-065

American Airlines has reviewed the proposed rule and provides the following comments regarding Docket No. FAA-2007-0242:

The proposed rule affects all B767-300 and A300-600 aircraft within our fleet. AAL has existing parts control procedures in place. In order for AAL to have clevis pins that fail to meet OEM standards, one of the following three parts control exceptions would have to occur:

1. Engineering would have to approve an alternate part number other than the OEM part numbers 491B1613028-003 and D52B1502-11. Engineering has never approved an alternate part number. Parts ordering history back to the year 2000 shows that 100% of these parts were only ordered from Middle River Aircraft Systems.
2. Clevis pins would have to be manufactured in-house by AAL. AAL does have procedures in place to manufacture parts in-house. However, the part must conform to all OEM standards including material type, coatings, and hardness. AAL does not have a type certificate or part drawing for manufacturing these clevis pins.
3. The OEM produced a defective batch of parts. In discussions with GE, AAL is confident that the failed clevis pin described in the AD did not come from the manufacturer.

In summary, AAL is confident through these parts control methods that all clevis pins in ownership conform to the OEM standard of Rockwell Hardness (C Scale) range of 31 to 38. As such, AAL requests the following change to the applicability (paragraph 2.c):

- A. Change the applicability to only those operators who manufacture the clevis pins in-house or procure the pins from sources other than the OEM.

-OR-

- B. Consider that this is not a fleet-wide safety risk, but an isolated event and rescind AD.

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MAINTENANCE & ENGINEERING

The following comments are provided independently of the above request.

- Compliance paragraph 2.(e)-2.(g) and Approved Part paragraph 2.(h) do not show an end point to verify clevis pin hardness. How will new parts from the OEM be handled? How will the current supply of clevis pins be distinguished to show successful hardness test?
- AAL performs Heavy Check Maintenance at intervals up to 33 months or 3,000 cycles between visits. The compliance window of 18 months or 4,500 flight hours after AD effective date will negatively impact AAL's flight operations. AAL requests that the time interval be extended to at least 33 months for full fleet accomplishment.
- AAL would like clarification on paragraph 2.(g)(2). This step is to perform a rebound hardness test on the head of the clevis pins. AAL would like to clarify that a stationary hardness tester may be used on clevis pins that are not installed.
- Paragraph 2.(g)(4) states that if the hardness is measured within the stated limits and the pin "has no visible defects" it can remain in service. AAL would like clarification on "visible defects" or recommends restating as follows: "If the hardness measured is within the range of 31 to 38 Rockwell Hardness (C Scale) and the pin passes visual inspection per the maintenance manual, the clevis pin can remain in service."

If you have any questions, comments or concerns, please feel free to contact Ronya Rolen, Sr. Engineer, at Ronya.Rolen@aa.com or by phone at (817) 224-0199.

Regards,



Rod Blake
Managing Director
Powerplant Engineering
American Airlines

RB:rr/lm



Delta Air Lines, Inc.
P.O. Box 20706
Atlanta, Georgia,
30320-6001

March 18, 2008

Craig Fabian
Director Technical Operations
Air Transport Association
1301 Pennsylvania Avenue, NW Suite 1100
Washington, DC 20004-1707
Phone: (202) 626-4134
Fax: (202) 626-6576

Subject FAA-2007-0242; Directorate Identifier NPRM 2007-NE-51-AD

SUMMARY

The FAA proposes to adopt a new airworthiness directive for General Electric Company CF6-80C2 and CF6-80E1 series turbofan engines. This proposed AD would require replacement of all clevis pins installed on the thrust reverser central drive units and upper and lower actuators, or replacement of pins that fail an on-wing rebound hardness test. This proposed AD results from failure of a thrust reverser during landing due to unapproved clevis pins being installed. The failure was due to lack of clevis pin hardness. The FAA is proposing this AD to prevent thrust reverser failure, which could lead to damage to the thrust reverser and airplane.

The rule proposes that these actions be completed within 18 months or 4,500 flight hours after the effective date, whichever occurs first.

DELTA'S COMMENTS

Paragraph (g) of the proposed rule requires the performance of a rebound hardness test of the installed thrust reverser central drive unit and actuator clevis pins. No instructions, test equipment specifications, or reference material is provided in this paragraph. Delta requests specific reference material approved by the OEM to be provided in the rule. This will ensure a specific and standardized test procedure is being utilized across the industry. In addition, providing such reference material will provide consistency and preclude erroneous test results.

Paragraph (h) of the proposed rule restricts the use of any clevis pin that has not passed the hardness test. This will require every pin to be tested prior to incorporation into stock or revision to maintenance procedures to include the hardness test prior to installation. Delta feels this process should be placed on the OEM before the pin is recorded as serviceable and provided to an operator.

A better method would be the creation of an alternate pin that meets the appropriate hardness specification and identified with a new part number. The proposed rule, as written, does not provide a means of tracking completion since the parts are not serialized or since the part number is not being changed. A new part number will simplify the procedure and ensure proper tracking of part usage and compliance with the requirements of the AD.

If you have any further questions or require additional information, please contact Rodney Markesbery - Program Manager, AD/Regulatory Programs, at (404) 714-1066.

Thank you,

A handwritten signature in black ink, appearing to read "Rodney Markesbery". The signature is fluid and cursive, with the first name "Rodney" and last name "Markesbery" clearly distinguishable.

Rodney Markesbery
Program Manager
AD/Regulatory Programs
Delta Air Lines



U·S AIRWAYS

Mark R. Rudo
Managing Director – Technical Services

March 28, 2008
Sent Via Email

Mr. Craig Fabian
Director of Technical Operations
Air Transport Association
1301 Pennsylvania Avenue, N.W., Suite 1100
Washington, D.C. 20004-1707

Subject: CF6-80C2/80E1 Thrust Reverser Actuator Clevis Pin – Notice of Proposed Rulemaking (NPRM)

Reference: /A/ Airworthiness Directive (AD) 08-AD-065
/B/ FAA NRPM 2007-NE-51-AD
/C/ Docket No. FAA-2007-0242
/D/ Clevis Pin Part Number D52B1502-11 (alternate 491B1613028-003)

Dear Mr. Fabian:

The Reference /A/ AD Memorandum forwarded Reference /B/ NPRM and requested comments. The NPRM, if adopted, would mandate replacement of all clevis pins installed on the thrust reverser central drive units and upper and lower actuators.

US Airways currently operates ten 767-200 aircraft with the CF6-80C2 series engines and owns two spare thrust reverser halves that would be affected by the proposed rule.

Operators were requested to comment on the proposed rule. In response, US Airways offers the following:

- Under paragraph (e) of the Reference /B/ NPRM for compliance, the AD must be performed within 18 months or 4,500 flight hours after the effective date of the AD, whichever occurs first.

As thrust reverser operation is flight cycle based, US Airways would propose to implement a flight cycle limit of 3,000, instead of the flight hour limit. Otherwise, US Airways would like to propose to have the FAA consider extending the flight hours limit to 7,000 flight hours to match the flight time limit of our C-Check.

- The AD will not have a service bulletin issued, as the clevis pins were non-OEM parts. Paragraph (f) only instructs “Replace the six clevis pins...”

US Airways requests the AD to include or reference instruction on the proper installation and removal procedures of the clevis pin.

(- Continued)

Mr. Craig Fabian
March 28, 2008
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Thank you for the opportunity to comment on this proposed rule.

Sincerely,

/s/ Mark Rudo

Mark Rudo
Managing Director – Technical Services
(412) 747-3882

MR/cw